

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,743	03/29/2004	Gunther Merz	SCH-10002/04	1682
25006	7590 06/19/2006		EXAMINER	
GIFFORD, KRASS, GROH, SPRINKLE & CITKOWSKI, P.C			PIZIALI, ANDREW T	
PO BOX 7021 TROY, MI 48007-7021		ART UNIT	PAPER NUMBER	
,			1771	-
			DATE MAILED: 06/19/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

				1				
		Application No.	Applicant(s)	t				
		10/811,743	MERZ ET AL.					
	Office Action Summary	Examiner	Art Unit					
		Andrew T. Piziali	1771					
Period fo	 The MAILING DATE of this communication apor Reply 	opears on the cover sheet with the	correspondence address -					
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REP CHEVER IS LONGER, FROM THE MAILING I nsions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period are to reply within the set or extended period for reply will, by status reply received by the Office later than three months after the mailined patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION .136(a). In no event, however, may a reply be tind d will apply and will expire SIX (6) MONTHS from the, cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).					
Status								
1)🖾	Responsive to communication(s) filed on 06	April 2006.						
·	This action is FINAL . 2b) This action is non-final.							
3)	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
	closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.					
Dispositi	ion of Claims							
4)🖂	Claim(s) 1-22 is/are pending in the applicatio	n.						
	4a) Of the above claim(s) <u>3,5,14,21 and 22</u> is/are withdrawn from consideration.							
5)	Claim(s) is/are allowed.							
6)⊠	Claim(s) <u>1,2,4,6-13 and 15-20</u> is/are rejected	l.						
·	Claim(s) is/are objected to.							
8)[Claim(s) are subject to restriction and	or election requirement.						
Applicati	ion Papers							
9)⊠	The specification is objected to by the Examir	ner.						
10)⊠ The drawing(s) filed on <u>29 March 2004</u> is/are: a)⊠ accepted or b) objected to by the Examiner.								
•	Applicant may not request that any objection to the	e drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).					
	Replacement drawing sheet(s) including the corre	· · · · · · · · · · · · · · · · · · ·						
11)	The oath or declaration is objected to by the E	Examiner. Note the attached Office	Action or form PTO-152.					
Priority (under 35 U.S.C. § 119							
12)⊠	Acknowledgment is made of a claim for foreig	n priority under 35 U.S.C. § 119(a	n)-(d) or (f).					
a)	a)⊠ All b)☐ Some * c)☐ None of:							
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
	application from the International Bure	` ''						
* 5	See the attached detailed Office action for a lis	st of the certified copies not receive	ed.					
Attachmen	t(s)							
1) Notice	e of References Cited (PTO-892)	4) Interview Summary	(PTO-413)					
	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate					
	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 or No(s)/Mail Date <u>6/4/2004</u> .	6) Other:	Patent Application (PTO-152)					

Application/Control Number: 10/811,743 Page 2

Art Unit: 1771

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Species 1 from each of the four Species Groups in the reply filed on 4/6/2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Claims 3, 5, 14 and 21-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species.

Specification

2. The disclosure is objected to because of the following informality: The specification refers to the surface resistance as 104 ohms, but should refer to the resistance as 10⁴ ohms (see claim 16). Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 4. Claims 1-2, 4, 6-13 and 15-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter that was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 1 claims a protective layer that significantly changes color in the event that a diffusion occurs from the interior of the compensator into the outer layer, but the specification fails to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the

Art Unit: 1771

invention. The specification mentions the use of a white protective layer (see [0007]), but the specification does not enable one to make a layer that changes color as claimed.

- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 6. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim is indefinite because legal regulations are variable and because it is not clear which regulations are "pertinent."

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 1-2, 6-8, 10-13 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 19639393 to Guenther in view of USPN 5,842,700 to Fang et al. (hereinafter referred to ad Fang) in view of WO 94/02772 to Doan.

Regarding claims 1-2, 6-8, 10-13 and 15-20, Guenther discloses a soft material compensator comprising a support carrier (3) having at least one layer of polymer fibers, and comprising a barrier layer (1) in the form of a polytetrafluoroethylene (PTFE) foil that is arranged at the side of said support carrier facing the inner side of the compensator and is bonded to said support carrier (see entire document including abstract and Figure).

Art Unit: 1771

Guenther does not appear to mention providing at the outer side of the compensator a protective layer in the form of an elastomeric outer layer that is likewise bonded to said support carrier, but Fang discloses that it is known in the sealant art to use repeating sheets of polymeric fabric bonded together with elastomeric material based on the desired seal thickness and seal construction (see entire document including column 2, lines 53-63 and column 8, lines 10-29). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use repeating sheets of the polymeric fabric bonded together with elastomeric material, as taught by Guenther, based on the desired seal thickness and seal construction.

Guenther does not appear to specifically mention the use of an outer layer that significantly changes color in the event that a diffusion occurs from the interior of the compensator into said outer layer due to damages of the barrier layer, but Doan discloses that it is known in the sealant art to use an outer layer that significantly changes color in the event that a diffusion occurs from the interior of the compensator into said outer layer due to damages of the barrier layer (see entire document including the paragraph bridging pages 3 and 4 and the paragraph bridging pages 4 and 5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to include an outer layer that significantly changes color, as taught by Doan, because in the event that a diffusion occurs from the interior of the compensator into said outer layer due to damages of the barrier layer the color change would alert the user of the failure.

Regarding claim 2, Guenther discloses that the layer of polymer fibers may be a woven layer (abstract).

Art Unit: 1771

Regarding claims 6-7, 10 and 12, Doan discloses that the outer layer is preferably white in color for leak detection purposes (page 2, lines 2-4). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the outer layer a white silicon elastomer, because the white color would assist in leak determination.

Regarding claim 7, considering that the outer layer disclosed by the applied prior art is identical to the claimed outer layer (white silicon elastomer), it appears to inherently possess sealing properties.

The Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPO 431 (CCPA 1977).

Regarding claims 8 and 10, Guenther discloses that one elastomeric intermediate layer (2) may be disposed between the support carrier and the barrier layer (see Figure).

Regarding claims 10 and 12, Fang discloses that the repeating sheets can be made by forming one long sheet, cutting the sheet, and stacking the layers (column 8, lines 10-29).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the intermediate layer with white silicon elastomer, because white

Application/Control Number: 10/811,743

Art Unit: 1771

silicon elastomer is desired for the outer layer (see above) and the same elastomer is used for each layer.

Regarding claims 11 and 12, Guenther does not appear to specifically mention the support comprising at least two fiber layers between which an elastomeric intermediate layer is disposed, but Fang discloses that it is known in the sealant art to use repeating sheets of polymeric fabric bonded together with elastomeric material based on the desired seal thickness and seal construction (see entire document including column 2, lines 53-63 and column 8, lines 10-29). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use repeating sheets of the polymeric fabric bonded together with elastomeric material, as taught by Guenther, based on the desired seal thickness and seal construction.

Regarding claim 13, Guenther discloses that the layers are bonded to each other by the silicon elastomer adhesive (see entire document).

Regarding claim 15, Guenther discloses that barrier layer may be electrically conductive (see abstract).

Regarding claim 16, Guenther discloses that the barrier layer may have a resistance of at most 10⁴ ohms (abstract).

Regarding claims 17 and 18, Guenther discloses that the silicon rubber intermediate layer(s) may each have a thickness of 250 microns (0.25 mm) (see document).

Regarding claims 19 and 20, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is

Application/Control Number: 10/811,743

Art Unit: 1771

capable of performing the intended use, then it meets the claim. Considering that the compensator taught by the applied prior art is identical to the claimed compensator, the compensator discloses by the applied prior art appears to be capable of performing the intended use.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over DE 19639393 to Guenther in view of USPN 5,842,700 to Fang in view of WO 94/02772 to Doan as applied to claims 1-2, 6-8, 10-13 and 15-20 above, and further in view of USPN 5,316,319 to Suggs.

Guenther does not appear to specifically mention the use of natural polymers, but Suggs discloses that it is known in the sealant art to use woven rubber fibers as sealant fabrics (see entire document including the paragraph bridging columns 2 and 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the polymer fibers from any suitable polymeric material, such as rubber (natural) fibers, as taught by Suggs, because it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability.

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over DE 19639393 to Guenther in view of USPN 5,842,700 to Fang in view of WO 94/02772 to Doan as applied to claims 1-2, 6-8, 10-13 and 15-20 above, and further in view of DE 4410413 to Guenther (hereinafter referred to as Guenther '413).

Guenther does not appear to mention crosslinking the intermediate layer and the barrier layer, but Guenther '413 discloses that it is known in the sealant art to crosslink the two layers for improved diffusion stability and a higher flexibility and workability (see entire document including abstract). It would have been obvious to one having ordinary skill in the art at the time

Application/Control Number: 10/811,743 Page 8

Art Unit: 1771

the invention was made to crosslink the layers, as taught by Guenther '413, for improved diffusion stability and a higher flexibility and workability.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ANDREW T. PIZIALI PATENT EXAMINER

atp